



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,385

11/25/2003

Hanjun Luo

H0678.70008US00

8005

23628 7590 05/28/2008  
WOLF GREENFIELD & SACKS, P.C.  
600 ATLANTIC AVENUE  
BOSTON, MA 02210-2206

EXAMINER

GERGISO, TECHANE

ART UNIT

PAPER NUMBER

2137

MAIL DATE

DELIVERY MODE

05/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,385	<b>Applicant(s)</b> LUO ET AL.	
	<b>Examiner</b> TECHANE J. GERGISO	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 17, 2008 has been entered.
2. Claims 1-5 have been examined and are pending.

### ***Response to Arguments***

3. Applicant's arguments filed on January 28, 2008 have been fully considered but they are not persuasive.
4. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The applicant argues that "none of these portions of IEEE describe a request for joining in a multicasting group, much less the interception of such a request, or "obtaining a port number, a MAC address and a multicasting IP address" from such a request. Furthermore, IEEE

Art Unit: 2137

is completely silent as to searching 802.1X subscriber information. No multicast authentication is discussed in IEEE, only the propagation of multicast packets“.

The examiner disagrees with the applicant's argument because Chow et al. discloses request for joining in a multicasting group, much less the interception of such a request, or obtaining a port number, a MAC address and a multicasting IP address in paragraph [0040] recited as follows: The **multicast gateway** is programmed, for example, by **secure web** page interactions, so that it contains a **list of known user packet addresses** or other **authentication qualifiers**; 0041; An individual **carrying an IEEE 802.11**-equipped device may then **listen to multicast stream(s)** containing all current "transmitting "users". See also paragraph [0051]; [0133]; [0139]. a **multicast group is identified** based on **the subscriber's profile** and **allocated a multicast address** and a new session is initiated.”

For the above reasons, the applicant's argument is not persuasive to overcome the prior arts in record (Over IEEE in view of Chow) to place independent claim 1 in condition for allowance. Dependent claims 2 and 3 are also not placed in condition for allowance based on their dependence from claim 1.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

Art Unit: 2137

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over IEEE Std 802.1X-2001. Port-Based Network Access Control *Approved 14 June 2001* IEEE-SA Standards Board (hereinafter referred to IEEE) in view of Chow et al. (hereinafter referred to Chow US Pub No.: 2003/0058827).

As per claim 1:

IEEE discloses an 802.1X protocol-based multicasting control method, comprising the following steps:

intercepting a request a message for joining a multicasting group sent from the authenticated subscriber (Figure 6.5 Figure 8-3: EAP-Request/Identity; Page 119: j Multicast propagation; Page 123: Section C.3.3 Crosstalk);

obtaining a port number and a MAC address and a multicast IP address of the subscriber from the request message (Page 78: Description: "The port number, protocol version, and initialization control for a port; Figure 6.5 Figure 8-3: EAP-Request/Identity; Page 119: j Multicast propagation; Page 123: Section C.3.3 Crosstalk);

searching corresponding subscriber account information in the 802.1x authenticated subscriber information according to said port number information and MAC address (figure 8.14-Supplicant PAE State machine; Table 10-1: 9.5.2 Supplicant Statistics).

IEEE does not explicitly teach performing 802.1x authentication for a subscriber and storing authenticated subscriber information and a message for joining a multicasting group and authenticating the subscriber's account number information and the multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise rejecting the subscriber's request. Chow in analogous art, however, teach performing 802.1x authentication for a subscriber and storing authenticated subscriber information and a message for joining a multicasting group and authenticating the subscriber's account number information and the multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise rejecting the subscriber's request (0040; The multicast gateway is programmed, for example, by secure web page interactions, so that it contains a list of known user packet addresses or other authentication qualifiers; 0041; An individual carrying an IEEE 802.11-equipped device may then listen to multicast stream(s) containing all current "transmitting" users'; 0051; 0133; 0139; a multicast group is identified based on the subscriber's profile and allocated a multicast address and a new session is initiated.). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by IEEE to include a message for joining a multicasting group and authenticating the subscriber's account number and multicasting IP address, and then adding the subscriber to the multicasting group if the authentication is passed successfully; otherwise the subscriber's request is rejected. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the desire to provide a packet-based wireless LANs to emulate person-

to-person and person-to-group communications representative of Private Land Mobile Radio Service (PLMRS) often called "push-to-talk" radio suggested by Chow in (0012).

As per claim 2:

IEEE discloses the 802.1X protocol-based multicasting control, comprising: an authentication server at 802.1X authentication end be used to authenticate the subscriber's account number information and the multicasting IP address (Page 78: Description: "The port number, protocol version, and initialization control for a port; Figure 6.5 Figure 8-3: EAP-Request/Identity; Page 119: j Multicast propagation; Page 123: Section C.3.3 Crosstalk).

As per claim 3:

IEEE discloses the 802.1X protocol-based multicasting control method, wherein the authentications of the subscriber's account number and the multicasting IP address are implemented through verifying whether the multicasting IP address is authorized receive account number information (figure 8.14-Suppliant PAE State machine; Table 10-1: 9.5.2 Suppliant Statistics).

### ***Allowable Subject Matter***

7. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: after consideration of claims 4, 5 and rewritten with claim 1 as shown below, the following features of a method which are not taught or further suggested and would not have been obvious over prior arts of record and these features are:

if the subscriber attached to a port for **802.1X authentication is based on port number** makes a request for joining in a **multicasting group through IGMP protocol**, the **subscriber's MAC address is searched for first**; if said MAC address is found, the **subscriber's account number information** is searched for according to said **MAC address and said port number**.

if the subscriber attached to a port for **802.1X authentication is based on MAC address** a request for joining in a **multicasting group through IGMP protocol**, the **subscriber's account number information** is searched for **directly** according to the **subscriber's MAC address and the port number**.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See the notice of reference cited in form PTO-892 for additional prior art

### ***Contact Information***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Techane J. Gergiso** whose telephone number is **(571) 272-3784** and fax number is **(571) 273-3784**. The examiner can normally be reached on 9:00am - 6:00pm.



Art Unit: 2137

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Emmanuel Moise** can be reached on **(571) 272-3865**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. J. G./

Examiner, Art Unit 2137

/Emmanuel L. Moise/

Supervisory Patent Examiner, Art Unit 2137